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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/046,655	01/14/2002	Hiroshi Matsunaga	MATS:035	1060

7590 12/09/2002  
ROSSI & ASSOCIATES  
P.O. BOX 826  
Ashburn, VA 20146-0826

EXAMINER

PHAM, LEDA T

ART UNIT	PAPER NUMBER
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2834

DATE MAILED: 12/09/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/046,655

Applicant(s)

MATSUNAGA ET AL. *h*

Examiner

Leda T. Pham

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 30 September 2002.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1 and 2 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 2 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All   b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                      | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                             | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>1/14/02</u> | 6) <input type="checkbox"/> Other: _____                                    |

**DETAILED ACTION**

***Response to Amendment***

1. This office action is in response to Amendment filed on 9/30/20.
2. Claims 1 – 2 are presented for examination.
3. In view of amendment, the examiner withdraws the objections to the claim 1.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Esumi et al. U.S. Patent No 6,413,061 B1 in view of R. F. Woll et al. (U.S. Patent No. 2,508,207.)

Esumi discloses a hermetic motor-driven compressor (figure 1) having a compressing element (3), a motor (2) for driving said compressing element, and a substantially cylindrical hermetic container (1) in which said compressing element and said motor element are axially arranged and housed. Esumi does not disclose the motor element having at least one linear section formed along an outer circumferential surface thereof and at least one through hole disposed in the vicinity of the outer circumference.

Figure 2 of Woll disclose the motor element having at least one linear section (7) formed along an outer circumferential surface thereof and at least one through hole (12) disposed in the vicinity of the outer circumference, a first gas passage (column 1, lines 40 – 44) that is formed by a space between said linear section (7) along the circumferential surface of said motor element

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(1) and an inside wall surface of said hermetic container (3) and allows passage of compressed gas discharged from said compressing element within said hermetic container, and a second gas passage (column 1 lines 52 – column 2 line 1) formed in parallel with said first gas passage that allows passage of compressed gas, said second passage comprising the through hole (12) in said motor element wherein the through hole in said motor element constituting said second gas passage is disposed outside of a smallest circle that is inscribed along the linear section formed in said motor element and is concentric with said motor element (figure 2) for the coolant gas passing through.

Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Esumi's motor having the linear section and the through hole as taught by Woll. Doing so would provide the cooling gas (air) passing through.

6. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Esumi and Woll as applied in the rejection against the base claim above, and further in view of Peters U.S. Patent No. 5,173,629.

The combination of Esumi and Woll refs substantially discloses the claimed invention, except for the added limitations of the hermetic motor-driven compressor wherein the through hole constituting said second gas passage is shaped like a bow, an outer periphery of the bow shape is like an arch that has a curvature larger than a curvature of the outer circumference of said motor element, and an inner periphery of the bow shape is like one of a line and an arc that has a radius larger than a radius of the inscribed circle.

Peters discloses in his figure 1 and 2 a stator in a motor having through hole (18) shaped like a bow wherein the outer periphery of the bow shape is like an arch that has a curvature

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larger than a curvature of the outer circumference of a motor element, and an inner periphery of the bow shape is like one of a line and an arc that has a radius larger than a radius of the inscribed circle for flowing of cooling air.

Although, it would have been obvious to a one of ordinary skill in the art at the time the invention was made to modify the motor element having the shape of the through hole in the stator like a bow as taught by Peter. Doing so would provide more cooling air flowing through.

7. Also, Woll (figure 2) discloses the claimed invention except for the different in shape of the through hole. It would have been an obvious matter of design choice to modify the shape of the through hole, since such a modification would have involved a mere change in the size of shape of a component. A change in size or shape is generally recognized as being within the level of ordinary skill in the art. *In re Rose*, 105 USPQ 237 (CCPA 1955).

### ***Conclusion***

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

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however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leda T. Pham whose telephone number is (703) 305-4864. The examiner can normally be reached on M-F (7:30-5:00) first Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nestor Ramirez can be reached on (703) 308-1371. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 746-9176 for regular communications and (703) 305-1341 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 306-3431.

Leda T. Pham  
Examiner  
Art Unit 2834

LTP  
November 29, 2002

  
NESTOR RAMIREZ  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2800